

SHNEYDER, A.D.; CHMURKO, I.S.

Photoelectric properties of mercury-activated layers of cadmium telluride. Fiz. tver. tela 4 no.3:806-807 '62. (MIRA 15:4)

1. Drogobychskiy gosudarstvennyy pedagogicheskiy institut imeni I.Franko.

(Cadmium telluride) (Photoelectricity)

CHMURNY, D.

Use and maintenance of electric apparatus for measuring temperature. p. 390.
ELEKTROTECHNIK, Prague, Vol. 10, no. 12, Dec. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956,
Uncl.

CHMURNY, D.

CHMURNY, D. Mistakes in heat measurement and new types of cells for heat measurement.
p. 121

Vol. 8, no. 3, Mar. 1956
TECHNICKA PRACA
TECHNOLOGY
Bratislava, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

CHURNY, D.

Continuous measurement of pH in industry.

p. 71 (Chemický Průmysl. Vol. 7, no. 2, Feb. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and
Their Applications. Instruments and Automation.

H

Abs Jour: Ref Zhur-Khim., No 8, 1959, 27759.

Author : Churny, D.

Inst :

Title : Development and Present State of Automation in the
Czechoslovak Chemical Industry.

Orig Pub: Automatizace, No 6, 179-182 (1958) (in Czech with
summaries in German, French, English and Russian)

Abstract: A survey of completed automation projects. -- Ye.
Stfanovskiy.

Card : 1/1

132

CHMURNY, D.

"Development and economic results of automation in the chemical industry of the USSR."

AUTOMATISACE, Praha, Czechoslovakia, Vol. 2, no. 6, June 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, No. 8, August 1959

Unclassified

CHMURNY, D.

Some economic aspects of automation in the chemical industry. p. 340.

AUTOMATIZACE. Praha, Czechoslovakia. Vol. 2, no. 11, Nov. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

CIMURNY, Daniel, inz.

Use of automatic computers in industrial management. Tech prace
14 no.3:172-176 Mr '62.

1. Slovnaft, n.p., Bratislava - Vlcie Hrdlo.

CHMURNY, Daniel, doc., inz.

Experience with the apparatus of pneumatic control system
ZPA-Praha with air pressure range 0,2-1 atm. Automatizace 5
no.7:195-197 J1 '62.

1. Slovenska vysoka skola technicka, Bratislava.

CHMURNY, D., docent

Commemorating the 50th birthday of professor Miroslav Salamon.
El tech cas 13 no:9:575-576 '62.

CHMURNY, Daniel

Maintenance of process control equipment and organization of
automation centers in chemical industry plants. Meres automat
11 no.8/9:241-245 '63.

1. Slovnaft narodny podnik, Bratislava.

CHMURNY, J.

A conference on insulating materials for higher temperatures. p. 349.
(NOVA TECHNKA, Vol. 1, No. 11, Nov 1956, Praha, Czechoslovakia)

SD: Monthly List of East European Accessions (MEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

CHMURNY, J.

From the activities of the Scientific Technical Society for Electrical Engineering of the Slovak Academy of Sciences; an excursion to the Research Institute of Cables and Insulators. p.256. (Strojoelektrotechnicky Casopis. Bratislava. Vol. 7, no. 4, 1956.)

SC: Monthly List of East European Accessions (EEAL) IC., Vol. 6, no. 7, July 1957. Uncl.

SECRET

1. The purpose of the Scientific Personnel is to

conduct research and development in the field of

the [illegible]

V

CHEURAY, J.

CHEURAY, J. Measurement of high-frequency power on output terminals of transmitters with symmetrical output. (Conclusion) . 546.

Vol. 17, No. 10, Oct. 1956.

SLABOPROUDY CEZOR.

TECHNOLOGY

Praha, Czechoslovakia

See East European Association Vol. 6, No. 3, March 1957

CHMURNY, J.

The development of radio technique and electronics. p.299.
(Technicka Praca, Vol. 9, No. 5, May 1957, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

CHMURNY, Rudolf, inz.

Interference periodicity in engaging alternate parts of spur gears. Stroj cas 16 no.1:44-48 '65.

1. Institute of Mechanics and Automation of the Slovak Academy of Sciences, Bratislava. Submitted April 1, 1964.

CHMURZYNSKA, W.

WOJTCZAK, L.; WOJTCZAK, A.B.; CHMURZYNSKA, W.

Studies on interstitial localization of enzymes in insects. Acta physiol. polon. 8 no.3:572-573 1957.

1. Z Zakladu Biochemii Instytutu Biologii Doswiadczalnej im. Nenckiego w Warszawie Kierownik: prof. dr W Niemierko.

(INSECTS,

interstitial enzyme localization (Pol))

(ENZYMES, determination

in insects, interstitial (Pol))

WOJTCZAK, L.; CHMURZYŃSKA, Wanda

Inhibition studies on insect polyphenol oxidase. Acta biochim.
polon. 7 no.1:39-49 '60.

1. Zakład Biochemii Instytutu Biologii Doświadczalnej im. Henc-
kiego, Warszawa. Kierownik Zakładu: prof.dr W. Niemierko.

(INSECTS metab.)

(OXIDASES metab.)

CHMURZYŃSKA, Wanda; ZIMLINSKA, Zofia

Insect tissue culture. Przegł. Zool. 2:139-144, 1961.

1. Department of biochemistry of the N. Gencki Institute of Experimental Biology of the Polish Academy of Sciences, Warsaw.

CHMURZYŃSKI, J.

Preliminary notes on the color preferences of females *Bembex rostrata* (L.)
(Hymenoptera Sphecidae); a preliminary note. In English.

P. 7. (EKOLOGIA POLSKA. SERIA A) (Warszawa, Poland) Vol. 5, no. 2, 1957

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

CHMURZYNSKI, Jerzy Andrzej

Eighth International Ethological Conference in the Hague,
September 12-22, 1963. Kosmos biol 13 no.3:275 '64.

CHMURZYNSKI, Jerzy Andrzej

Spatial orientation of the flying Hymenoptera. Przegl zool 8 no.
2:119-137 '64.

1. Department of Biology, M. Nencki Institute of Experimental
Biology, Polish Academy of Sciences, Warsaw.

CHODKOWSKI, J.A.

Studies on the stages of spatial orientation in female *Bombus terrestris* (Linne 1758) returning to their nests (Hymenoptera, Sphegidae). *Acta biol. exp. (Warsz.)* 24 no. 1:103-113, 1971.

1. Department of Biology, the Polish Institute of Experimental Biology, Warsaw 22, Poland.

CHINUTIN, M. S. 13

PROCESSES AND PROPERTIES INDEX

Dielectric losses of some insulating liquids at high frequencies under imposition of a constant electric field. M. S. Chinutin. *Vysokaya Nauch.-Issledovatel. Inst. Metal. Shornik* Trade No. 3, 80-100(1940).—The following compounds were tested: (1) transformer oil, (2) mixt. of 80% transformer oil + 20% rosin, (3) mixt. of 55% paraffin oil + 45% rosin, (4) heavy mineral oil, (5) castor oil, and (6) paraffin oil. The const. elec. field did not exceed 77 kv./cm. In all the cases there was no decrease of $\tan \delta_{max}$ due to the elec. field. H. Z. Kamich

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000

CHMUTIN, M. S.

FD 428

USSR/Physics - Dielectric permeability of salt

Card 1/1

Pub. 147-14/16

CHMUTIN, M. S.

Author

: Chmutin, M. S.

Title

: Dependence of the dielectric permeability of NaCl crystals upon temperature

Periodical

: Zhur. eksper. i teor. fiz. 26, 640-644, May 1954

Abstract

: Investigates the dependence of the dielectric permeability of rock-salt crystals upon temperature in the range 15-550°. Establishes that at a temperature around 500-520°, epsilon begins to rise sharply, at which the temperature coefficient of dielectric permeability ϵ_{Ke} increases strongly. Expresses the assumption that the sharp rise of epsilon is due to the increase in the number of "weakly connected" Na ions and to the appearance of "weakly bound" Cl ions.

Institution

: Stalingrad Pedagogic Institute

Submitted

: April 10, 1953

KOBZAREV, Petr Artem'yevich; CHMUTIN, M.S., kand.tekhn.nauk, red.;
KUKLIN, P.V., red.; ZIBROVA, K.D., tekhn.red.

[Miniature thermoelectric power plants] Miniatiurnye termo-
elektrostantsii. Pod red. M.S.Chmutina. Stalingrad, Knizhnoe
izd-vo, 1958. 34 p. (MIRA 13:9)
(Thermoelectric generators)

AUTHORS: Mikhaylov, G. P., Fedoseyev, G. P., 48-22-3-17/30
 Skanavi, G. I., Chmutin, M. S., Ksendzov, Ya. M.,
 Matsonashvili, B. N., Kolomoys'tsev, F. I., Vodop'yanov, K. A.

TITLE: Discussions on Reports Submitted by: K. A. Vodop'yanov and
 I. G. Vorozhtsova; K. A. Vodop'yanov and G. I. Galibina;
 B. N. Matsonashvili (Preniya po dokladam: K. A. Vodop'yanova
 i I. G. Vorozhtsovoy; K. A. Vodop'yanova i G. I. Galibinoy;
 B. N. Matsonashvili)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958,
 Vol. 22, Nr 3, pp. 309-310 (USSR)

ABSTRACT: G. P. Mikhaylov comments the report submitted by K. A.
 Vodop'yanov and I. G. Vorozhitskaya as follows: The frequency
 band is too narrow in the lecture delivered as to draw any
 conclusions on the relaxation processes in mica. - G. P.
Fedoseyev says with respect to the same lecture: The lectured
 conclusions are apparently scarcely convincing. The explanation
 of the change-mechanism of the dielectric constant and of the
 angle-tangent in mica, however, is of value. Complementary
 works must be carried out, however, in order to give a more
 convincing effect to the judgement on the relaxation character

Card 1/4

Discussions on Reports Submitted by: K. A. Vodop'yanov and 48-22-3-17/30
I. G. Vorozhtsova; K. A. Vodop'yanov and G. I. Galibina;
B. N. Matsonashvili

in mica. - G. I. Skanavi: Two essential contradictions exist between the works by K. A. Vodop'yanov and G. I. Galibina and the work by B. N. Matsonashvili. 1) Matsonashvili discovered relaxation maxima on the $\text{tg } \delta$ -curves of the alkaline-halogen crystals, which were not observed by Vodop'yanov and Galibina. 2) Vodop'yanov and Galibina maintain that with an increase in lattice-energy of the alkaline-halogen crystals, the $\text{tg } \delta$ decreases at room-temperature and high-frequency. Matsonashvili did not find such a correlation. The first contradiction is based on the fact that Vodop'yanov and Galibina determined the temperature dependence of $\text{tg } \delta$ on the basis of measurements at different temperatures with large temperature intervals and not in vacuum. The second contradiction may be explained by the fact that the real losses of the alkali-halogen crystals are very small at room-temperature. The losses increase rapidly, however, due to the hygroscopicity of many crystals, if no precautions were taken. M. S. Chmutin: An approximating extra-polation of the $\text{tg } \delta$ -value to high temperatures, leads - according to data by Vodop'yanov and Galibina - to a conformity with our experiments. Though

Card 2/4

Discussions on Reports Submitted By: K. A. Vodop'yanov and 48-22-3-17/30
I. G. Vorozhtsova; K. A. Vodop'yanov and G. I. Galibina;
B. N. Matsonashvili

Matsonashvili carries out his tests in vacuum, his results by extrapolation to high temperatures, are higher than ours. - Ya. M. Ksendzov: Data with smaller values of $\text{tg } \delta$, viz. the data obtained by B. N. Matsonashvili, inspire more trust. - B. N. Matsonashvili: The work-results obtained by Vodop'yanov and Galibina suffer from the fact that they were determined under atmospheric conditions. The hygroscopicity of the samples was markedly expressed in this case. Chmutin criticized the high $\text{tg } \delta$ -values I obtained. I showed in my work that the dielectric properties depend on the previous history of the sample. Therefore, only results obtained by the measurement of one and the same sample may be compared. It would be absolutely necessary to carry out a "complex" investigation of the different properties of the alkaline-halogen mono-crystals with the same samples and on the same conditions. - F. I. Kolomoyshev: It may be assumed that no fundamental contradictions exist between the experimentally obtained results which were determined in the laboratories by G. I. Skanavi and K. A. Vodop'yanov since the previous history of

Card 3/4

Discussions on Reports Submitted by: K. A. Vodop'yanov and 48-22-3-17/30
I. G. Vorozhtsova; K. A. Vodop'yanov and G. I. Galibina;
B. N. Matsonashvili

the samples may cause different results with the measuring of the $\text{tg } \delta$. - K. A. Vodop'yanov: The methods applied are the decisive factor in carrying out similar works as that by Matsonashvili and ours. The results obtained by Skanavi with his method cannot deny the presence of a connection between $\text{tg } \delta$ and lattice-energy. It must be replied to G. P. Fedoseyev that it was not provided within the scope of this work to explain the practical usefulness of the thermal treatment of mica.

AVAILABLE: Library of Congress

1. Mica--Dielectric properties 2. Single crystals--Dielectric properties 3. Single crystals--Conductivity 4. Alkaline-halogen crystals--Dielectric properties

Card 4/4

S/081/62/000/001/044/067
B168/B101

AUTHORS: Chmutin, M. S., Baluyeva, T. V.

TITLE: Electrical properties of porous clay filler

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 346, abstract
1K328 (Sb. tr. Stalingr. in-t inzh. gor. kh-va, v. 2,
1959, 133-135)

TEXT: Methods of determining the electrical characteristics of porous
clay filler - dielectric constant, tangent of the angle of dielectric
losses and resistivity - are described and results of determinations are
given. [Abstracter's note: Complete translation.]

Card 1/1

67188

SOV/58-59-7-15667

24.7800

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 7, p 144 (USSR)

AUTHOR: Chmutin, M.S.

TITLE: Measurement of the Dielectric Constant and Tangent of the Angle of Dielectric Losses at High Temperatures

PERIODICAL: Uch. zap. Leningr. gos. ped. in-ta im. A.I. Gertsena, 1958, Vol 148, pp 101 - 108

ABSTRACT: Using a modification of the Wien bridge circuit (M. Wien, Phys. Ztschr., 1930, Vol 31, p 793), in which the barretter bridge was replaced with a tube bridge, the author measured the dielectric constant (ϵ) and the tangent of the angle of dielectric losses ($\tan \delta$) in rock salt. Measurements were conducted at a frequency of 2.12×10^6 c at temperatures ranging from 20° to 640°C . At temperatures above 500°C it was found that the pulsation method yields increased values of ϵ . At 520°C a break was found in the temperature dependence of $\tan \delta$, indicating the emergence of new current carriers (chlorine ions and an increase in the number of weakly bound sodium ions). The diminution of the specific resistance at temperatures below 440°C , as compared with the results of

Card 1/2

67188

SOV/58-59-7-15667

Measurement of the Dielectric Constant and Tangent of the Angle of Dielectric Losses
at High Temperatures

other authors (N.P. Bogodoritskiy, V.N. Malyshev, Zh. tekhn. fiziki, 1934, Vol 4, p 1036; Fizika Dielektrikov. Red. Val'ter, A.F., 1932, p 152) is ascribed to a difference in crystal-growing methods. At temperatures between 250° and 300°C the described method of measuring $\tan \delta$ is impracticable; the accuracy of measuring ϵ is also low.

L.K.

Card 2/2

35110

S/058/62/000/002/030/05
AC61/A101

24,7800 (1035,1043,1145)

AUTHOR: Chmutin, M. S.

TITLE: Dielectric constant and dielectric loss angle tangent in some alkali-halide crystals in the 250 - 620°C range

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1962, 25, abstract 22238
("Sb. tr. Stalingr. in-t inzh. gor. kh-va", 1959, v. 2, 149 - 154)

TEXT: Measurement results are presented for dielectric constant (ϵ), resistivity (ρ), and loss-angle tangent ($\tan\delta$) of LiF, NaF, NaCl, KCl, KBr crystals, and of firebricks, between 20 and 620°C. The measurements were made on the frequencies of 1.4 and 2.0 Mc. The following activation energy values were determined from $\log\rho = f(1/T)$ curves: 1.07; 1.22; 0.89; 0.87; 0.79 eV for LiF, NaF, NaCl, KCl, and KBr, respectively. These values are in good agreement with those of other authors. Problems of measurement accuracy are discussed at length. The feasibility of using the method concerned for measuring ϵ and $\tan\delta$ in semiconductor materials with $\rho \sim 10^5$ ohm-cm is indicated. ✓

V. Lyubin

[Abstracter's note: Complete translation]

Card 1/1

KARYAKIN, A.V.; CHMUTINA, L.A.

Luminescence of glycinin. Izv. AN SSSR. Ser. fiz. 27 no.6:791-795
Je '63. (MIRA 16:7)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo
AN SSSR i Volgogradskiy mekhanicheskiy institut.
(Glycinin--Spectra)

KARYAKIN, A.V.; GUMUTINA, L.A.

Spectral investigation of dye salt solutions in the presence
of biopolymers. Biofizika 9 no.4:515-518 '64. (MIRA 18:3)

1. Institut geokhimi i analiticheskoy khimii imeni Vernadskogo
AN SSSR, Moskva i Politekhnikheskiy institut, Volgograd.

KARYAKIN, A.V.; CHMUTINA, L.A.

Spectral and photochemical properties of chlorophyllin in interaction with albumin. Dokl. AN SSSR 162 no.1:208-210 My '65. (MIRA 18:5)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo AN SSSR i Politekhnikheskiy institut, Volgograd. Submitted June 11, 1964.

KARYAKIN, A.V.; CHEPUTINA, L.A.

Influence of environmental pH on the interaction of acridine orange with glycine. Biofizika 9 no.6:666-670 '64.

(MIRA 18:7)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR, Moskva i Politekhicheskiy institut, Volgograd.

L 1659-66 EWT(m)/EWP(j) RM

ACCESSION NR: AP5021415

UR/0076/65/039/008/1895/1899
541.8+543.42

AUTHOR: Karyakin, A. V.; Chmutina, L. A.

TITLE: Studies of alcohol solutions of dyes and pigments in the presence of a polyamide

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 8, 1965, 1895-1899

TOPIC TAGS: polyamide, fluorescent dye, chlorophyll, photooxidation, fluorescence spectrum

ABSTRACT: The experiment involved a study of the spectral characteristics of alcohol solutions of methylol polyamide with the pigment chlorophyll and with anionic and cationic dyes whose interaction with natural proteins in aqueous solutions at various pH's had been established earlier. Absorption spectra of solutions of the polyamide with tryptaflavine, eosin, and acridine orange, and fluorescence spectra of solutions of the polyamide with fluorescein, eosin, acridine orange, coryphosphine, rhodamine 6G, tryptaflavine, and pyronine (all fluorescent dyes) and chlorophyll were recorded. The same regularities were observed in both sets of spectra. In the case

Cord 1/2

L 1659-66

ACCESSION NR: AP5021415

of the fluorescent dyes, the replacement of the natural protein by the polymer results in a considerably lesser spectral change than in buffer solutions. The weak interaction with the high-molecular synthetic substance having a peptide bond is due to its lack of functional carboxyl groups. Even when the polyamide is weakly bound to the pigment, it has a strong influence on its photochemical activity. It stabilizes the photooxidation of the pigment both under natural and artificial illumination. "We express our appreciation to L. A. Tumerman⁴⁴ and L. Ye. Minchenkova for assistance in the experiment." Orig. art. has: 5 figures and 1 table. ⁴⁴

ASSOCIATION: Institut geokhimi i analiticheskoy khimii, Akademiya nauk SSSR (Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 14Mar65

ENCL: 00

SUB CODE: GC

NO REF SOV: 015

OTHER: 002

Cord 2/2 *SP*

KARYAKIN, V. I. CHENUTINA, L.A.

study of alcohol solutions of dyes and pigments in the presence
of polyamide. Zhur. fiz. khim. 39 no.8:1895-1899 Ag '65.

(MIRA 18:9)

1. Institut geokhimi i analiticheskoy khimii AN SSSR.

CHMUTINA, Ye.P.; KOLOYARTSEVA, T.I.

Physical development of kindergarten children in Khabarovsk in
1959. Vop. okh. mat. i det. 6 no.4:73-77 Ap '61. (MIRA 14:6)

1. Iz kafedry pediatrii (zav. - dotsent G.S.Postol) Khabarovskogo
meditsinskogo instituta (dir. - prof. S.K.Nechepayev).
(Khabarovsk--CHILDREN--GROWTH)

CHMUTOV, A.P.

Graphical method for designing closed-loop power distribution networks. Trudy LIEI no. 49:16-28 '63.

Calculation of the selectivity of the protection systems of closed medium voltage networks using electronic digital computers. Ibid. 168-88

Calculation of closed low-voltage power distribution networks using electronic digital computers. Ibid. 89-100 (MIRA 17:6)

CHMUTCV, K.

Portable illuminator. Sov.foto 17 no.5:51-52 My '57. (MLRA 10:7)
(Photography--lighting)

DUBININ, M.M.; DYATKINA, M. Ye.; CHMUTOV, K.V.

Iakov Kivovich Byrkin; 1894 - ; on his seventieth birthday.
Zhur. fiz. khim. 39 no. 1s265-266 Ja '65 (MIRA 19:1)

Optimum temperature of decomposition of chloropicrin vapors in registering their passage through heated tubes. K. GIMBUTOV AND YA. ZHUKOV. *J. Applied Chem.* (U. S. S. R.) 3, 425-7(1932).—The use of excessive temps. (over 500°) may lead to the coloring of I₂-starch paper because of formation of O₃. V. KATCHEVSKY

[illegible]

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
CHMUTOV, Y. V. Co Device for automatic measurement of the quantity and velocity of erosion. — Y. V. Chmutov and V. S. Prolov. <i>J. Applied Chem. (U. S. S. R.)</i> 9, 1858-59 (in German 1956) (1958). — Construction details. A. A. Podgorny										ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION 18000 SYMBOLIC 180000 1-17 DIV 504 180000 1-17 DIV 504 180000 1-17 DIV 504									
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CHMUTOV, K. V.

PROCESSES AND PROPERTIES - 11

CAPILLARY CONDENSATION IN AN ARTIFICIAL CAPILLARY, AND THE DETERMINATION OF THE THICKNESS OF AN ADSORBED WATER FILM ON GLASS. K. V. Chmutov. *J. Phys. Chem.* (U. S. S. R.) 9, 3459 (1937). The thickness of the water films formed in capillaries by condensation range from 62 Å. at 0 mm., 509 at 14, 2475 at 28, to 3891 Å. at 32 mm. vapor pressure. These values are held to be applicable only at the particular glass used. F. H. R.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNOBILIN

CONCISE

TABULAR MAP ONLY ONE

RELATIONS

FROM CON-17

REVISION ONE ONLY IS:

1ST AND 2ND SUBJECT										3RD AND 4TH SUBJECT									
CHROMIUM, S.I. ca 1 Automatic release for the version balance of MacBain. K. M. Chumakov and A. T. Khalasova. <i>J. Applied Chem. (U. S. S. R.)</i> 10, 1335-6 (in German 1336) (1957). -The device is described and drawing is appended. A. A. Fedorov																			
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150000 02										150000 02									
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CHMUTOV, K. V.

Improvised means of protection against chemical warfare, Moskva, Gos nauch.-tekhn. izd-vo khimich. lit-ry, 1942. 38 p.

Cyr. 4 UA3

CHMUTOV, K.V.

CA

A micro-method for measuring diffusion coefficients.
K. V. Chmutov and O. Vashlovich (Vershilov Acad.
Chem. Diffus.). Doklady Akad. Nauk S.S.S.R. 80, 888-8
(1948). Diffusion begins in a glass chamber, consisting of
two glass plates, each of area 0.5×3 mm. At subse-
quent intervals, the transmittance of any preselected
layer 0.25 mm. thick can be compared with that of a solu-
tion of known concn. by means of a split-field optical arrange-
ment. Cyrus Feldman

CHMUTOV K.

USSR/Chemistry - Gelatinous Materials Apr 1947
Chemistry - Colloids

"Special Cases of Coloring of Gelatin Layers,"
K. Chmutov, G. Yushkevich, Military Academy of
Chemical Defense SA imeni K. E. Voroshilov, 4 pp

"Kolloidnyy Zhurnal" Vol IX, No 4

Experimental data, with graphs and a diagram of apparatus. Concludes that in case of small concentrations on the edges of a colored zone there is a change of effect: a decrease in density of coloring in the strip, which may be explained by partial washing off of the coloring agent as it begins to collect on the surface of the gelatine but is weakly joined to it. Submitted 23 Jan 1947.

17T85

2

CHENITOV, K. S.
CA

Absorption phenomena in capillary systems. II. K. V. Chenitov. *Kolloid. Zhur.* 11, 44-46(1949); cf. C.I., 43, 2076. The dimensions of liquid drops condensed from vapor between 2 quartz lenses were determined for different vapor pressures at 30°. Visible drops appeared when the relative vapor pressure p/p_0 was greater than 0.1, but per-severed at lower p/p_0 (e.g., 0.2). The curvatures of the menisci calculated from the Kelvin equation were several times that calculated from the distance between the lenses for benzene, H₂O, and R10H. The Kelvin equation cannot be used for computing the pore radius of adsorbents.
J. J. Likierman

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

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CHMUTOV, K. V.		PROCEDURE AND PROPERTIES INDEX	120 AND 4TH COPIES
CA		Structure of active carbons and time of attainment of the adsorption equilibrium. M. M. Dubinin, K. V. Chmutov, and N. G. Alekseev. <i>Doklady Akad. Nauk S.S.S.R.</i> 66, 878-8 (1949). Adsorption of propionic (I), valeric (II), and crotonic (III) acid from 20 ml. of a 0.01 N aq. soln., was studied on 0.1-g. samples of sucrose carbon activated with CO₂ to different degrees of loss of wt., (a) 48.5%, (b) 12.5%, (c) 7.5%, and (d) 5%, in the order of increasing fineness of porosity. On a, equil. was reached, at room temp., within 1 hr., with 1.20, 2.14, and 2.65 millimoles/g. adsorbed, resp., of I, II, and III. In the case of b, c, and d, equil. was not yet reached even after 1 month. For the initial stage of the adsorption, the usual series was reversed, thus, after 1 hr., on b, 0.80, 0.64, and 0.45 millimoles/g., on c, 0.25, 0.11, and 0.09, on d, 0.088, 0.083, and 0.081, resp. After 48 hrs., the series was still reversed on c and d, with (c) 0.80, 0.23, and 0.083, (d) 0.17, 0.080, and 0.081, but became mixed on (b), 1.10, 1.18, and 0.81. After 16 yrs., the figures were, on (b), 1.34, 1.28, and 1.25 (mixed series), on (c), 1.07, 0.80, and 0.31, on (d), 0.55, 0.41, and 0.25 (reversed series). Since there remained some doubt as to whether the figures obtained after 16 yrs. at room temp. corresponded to actual equil., accelerated expts. were made in which the samples were additionally kept at 100° for from 10 to 30 hrs., then 1 more hr. at room temp. On a, this resulted in no further change of the adsorption; on c, the figures were, after 10 hrs., 0.82, 0.39, and 0.60 (mixed series), and on d, after 10 hrs., 0.41, 0.28, and 0.48 (mixed series). The reversal of the normal series, observed on d after 16 yrs. at room temp., does not quite repeat itself in the accelerated expt.	2
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CHEMISTRY, K.V. SA		341.183.3 : 334.321.9 A 54 d	
872. The influence of ultrasonic radiation on the adsorption of fatty acids by fine-grained carbon. K. V. CHIRKOV AND N. G. AAKHIEV. Dokl. Akad. Nauk, 233, 87 (No. 2) 321-3 (1969) In Russian.			
Solutions of propionic, valeric and heptylic acids were adsorbed on large-grained and fine-grained carbon and on carbon black; the influence of ultrasonic irradiation on the quantity adsorbed was measured. If the acids are arranged in the order of quantity adsorbed, ultrasonic irradiation alters the sequence on fine-grained carbon only and with this material the quantity adsorbed is increased much more by irradiation than with coarse-grained carbon. Adsorption on carbon black is not affected by irradiation. These effects are attributed to increase in mobility of the acid molecules by the removal of steric hindrance; the acid molecules being, as it were, shaken down into the pores of the adsorbent by irradiation.			
W. R. STOKES			
ASA 354 METALLURGICAL LITERATURE CLASSIFICATION			
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CHMUTOV K. V.

IA 169791

USGR/Physics - Laboratory Equipment Aug 50

"Simple Method of Making Steel Needles," K. V. Chmutov, V. V. Nemtsova

"Zavod Lab" Vol XVI, No 8, p 1022

Very thin steel needles are sometimes required in physicochemical laboratories, e.g., for finishing holes in specimen holders of electric microscope. Authors suggest simple and quick method for obtaining such steel needles by electrolytical dissolving of metal. Lead plate serves as one electrode and piece of steel wire is used for other

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USGR/Physics - Laboratory Equipment Aug 50
(contd)

electrode. Electrolyte - dilute sulfuric acid (1.84), 1-3 ml to 50 ml of water. Alternating current from a lighting main line may be used through rheostat for electrolysis. Process of sharpening needle may be completed in 3-5 min.

169791

CA

CHMUTOV, K.V.

Diffusion of linear polymers. II. Temperature dependence of the diffusion coefficient of vinyl polymers. I. Ya. Shoen and K. V. Chmutov. *Zhur. Fiz. Khim.* 28, 286-304 (1961); cf. *C.A.* 45, 4116i. — With the app. described earlier (*loc. cit.*), the diffusion coeff. D , of vinyl polymers, was measured between 20 and 80°. The systems studied were polystyrene-ethylbenzene (I), polystyrene-Et acetate, polyvinyl acetate-Et acetate, polyvinylal. -water, polyisobutene-isooctane. An advantage of the app. used is that it does not limit the choice of solvent or the temp. range. Typical results for I are $D = 1.0, 1.0, 0.96, 0.4,$

$0.9, 1.2 \times 10^{-7}$ sq. cm./sec. at 25, 35, 45, 61, 65, 75,° resp. The data at low temp. are reproducible after heat-treatment. The changes responsible for the min. in D at about 60° are thus reversible. Minima are also observed for the other systems, although some are less marked. This anomalous temp. of D is contrary to Einstein's law and is explained by a change of state of the mols. of solute. Polymerization is excluded; aggregation is improbable. A change of shape of the mols. suggests itself. Indeed the temp. at which D is min. is close to the glass temp. for each polymer. This near-equality establishes a bridge between the properties of the polymer in bulk and of its mols. in soln. and militates against the identification of polymer glass transformations with changes of the 2nd kind. The freezing-in is a mol. property associated with the appearance of long-range order in the polymer chain. Michel Baudart

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

Electron-microscopic study of coagulation of vanadium
oxide sols with electrolytes. A. V. Brozhberg, V. M. Luk-
yanovich, V. V. Nemtsov, L. V. Radushkevich, and K. V.
Chmutov. *Doklady Akad. Nauk S.S.S.R.* 85, 369-72
(1952); cf. C.A. 47, 9717i. — Eight-months-old V_2O_5 sols
(2.3 g./l.) were coagulated with KCl (final concn. 0.1N)
and shaken vigorously in a large vol. of water. From the
resultant suspension preps. were made for electron-micro-
scopic observations. Three photographs are given. Manual
shaking results in partial peptization, and the threads of
 V_2O_5 coalesce into braids. More vigorous mech. or ultra-
sonic agitation produces complete peptization, and the
braids break up into fine threads with only partial coales-
cence. Under certain conditions, especially with high elec-
trolyte concns., surprising results are obtained—the braids
break up and form "droplets." The concn. of electrolyte
necessary to initiate "droplet" formation depends on the
cation; in the order of increasing effectiveness: Li^+ , Na^+ ,
 K^+ , Ca^{++} , or Li^+ , Ca^{++} , Ce^{+++} . Tentative assumptions
are made to explain "droplet" formation. I. Rencowitz.

11-9-54
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USSR.

Electron-microscopic study of colloidal objectives by means of development. A. V. Brounberg, V. M. Lukyanovich, V. V. Nemtsova, L. V. Radushkevich, and K. V. Chmutov. *Doklady Akad. Nauk S.S.S.R.* 87, 81-4 (1953); *U.S.S.R.* 47, 97174. — The method of development (cf. C.A. 46, 13123) as a means of detecting, with the electron-microscope, anisotropic structures of colloidal preps. is further demonstrated with Zn(OH)₂ hydrosols (I) and with dil. solns. of tobacco mosaic virus (II). Colloidal Ag formed by reducing 0.05% AgNO₃ in I with 1 drop of 1% hydrazine is condensed at the sharp edges with none on the surface of the plates of I. To a lesser degree this is true of Au formed by reducing 0.2% AuCl₃ with 1 drop of 1% NH₂OH-HCl. Because of the opacity of I the dry prep. on the cellulose film is treated with a drop of 0.01N HCl, the liquid phase blotted off with strips of filter paper, washed with H₂O, and dried. The outlines of I thus lost are observed by preliminary inspection before the next treatment. Colloidal Ag formed by reduction with hydrazine in II condenses at the sharp end-to-end joints of the rods of II. None condenses on the surface. Unlike with V₂O₅ hydrosols (cf. C.A. 46, 13317), aging does not affect the distribution of Ag on II; this indicates not only anisotropy but also a more compact, impermeable (to Ag) structure of the rods of II. I. Bencowitz.

OL'SHANOVA, K.M.; CHMUTOV, K.V.

Chromatographic method in qualitative analysis; report 1. Zhur.anal.
khim. 8 no.4:211-216 J1-Ag '53. (MLRA 6:8)

1. Institut fizicheskoy khimii Akademii nauk SSSR, Moscow.
(Chromatographic analysis)

BROMBERG, A.V.; LUKYANOVICH, V.M.; MENISOVA, V.V.; RADUSHKEVICH, L.V.;
CHMUTOV, K.V.

Electron-microscopic study of vanadium pentoxide sols. Zhur. Fiz. Khim.
27, 379-88 '53. (MIRA 6:5)
(CA 47 no.19:9717 '53)

CHESTOV, K.V.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Chmutov, K.V.	"Investigation by Electron-	Institute of Physical Chemistry,
Bromberg, A.V.	microscope of the Fine	Academy of Sciences USSR
Nemurov, V.V.	Structure and Properties	
Luk'yanovich, V.M.	of Colloids"	
Radushkevich, L.V.		

80: W-30604, 7 July 1954

CEMUTOV, K.V.; SUKHOV, G.V., redaktor: RAKOV, S.I., tekhnicheskiy redaktor

[Physical chemistry experiment procedures] Tekhnika fiziko-khimi-
cheskogo issledovaniia. 3-e perer. i dop. izd. Moskva, Gos. nauchno-
tekhn. izd-vo khimicheskoi lit-ry, 1954. 341 p. (MLRA 7:8)
(Chemistry, Physical and theoretical--Laboratory manuals)

CHMUTOV, K. V.

Chromatographic method in qualitative analysis. II.
K. M. Oshanova and K. V. Chmutov (Inst. Phys. Chem.,
Acad. Sci. U.S.S.R., Moscow). *Zhur. Anal. Khim.* 9,
67-75 (1954); cf. *C.A.* 47, 11648f. — Chromatographic de-
tection of Bi^{3+} , Hg^{2+} , Hg^{+} , Pb^{2+} , Cu^{2+} , Ag^{+} , and Cd^{2+}
was studied on Al_2O_3 , Na Permutit, Sulfunit, and Ask-
angel with various developers. At pH approx. 0.70, Ask-
angel reacted with salt solns. and, therefore, was omitted in
the exptl. work. KI detected Hg^{2+} , Hg^{+} , Cu^{2+} , Bi^{3+} ,
and, in the absence of Bi^{3+} , Pb^{2+} . H_2S (soln. and gaseous) and
 Na_2S indicated Cd^{2+} . An alk. soln. indicated Hg^{2+} , Hg^{+} ,
 Cu^{2+} , and Ag^{+} . Na_2SO_3 and thiourea indicated Hg^{2+}
and Bi^{3+} .
M. Hosh

CHMUTOV, K.V.

USSR/ Physics - Absorption of gases

Card 1/1 Pub. 86 - 17/37

Authors : Chmutov, K. V., Mem. Corresp. Acad. Sci. USSR; and Filatova, N. V.

Title : Model setup of a process for the absorption of gases, vapors and dissolved substances

Periodical : Priroda 43/10, 95-96, and insert, Oct 1954

Abstract : The reclaiming of gases, vapors and dissolved substances by an absorption and adsorption process is described. A model setup of the apparatus is shown. The process consists of passing an uninterrupted stream of a mixture or solution through layers of a granulated substance placed in a tube, chamber or very-long column. Illustrations; graphs.

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USSR/ Scientists - Physics

Card 1/1 Pub. 124 - 13/40

Authors : Chmutov, K. V., Memb. Corresp., Acad. of Sc., USSR

Title : Memorial days for Marie Sklodovska-Curie in Poland

Periodical : Vest. AN SSSR 1, 66-68, Jan 1955

Abstract : Minutes are presented of the special session of the Polish Academy of Sciences in Warsaw, Poland (October 6 - 7, 1954), honoring the twentieth anniversary of the death of the famous Polish scientist Marie Sklodovska-Curie, co-discoverer of radium, polonium and radioactivity.

Institution :

Submitted :

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APPROVED FOR RELEASE: 06/12/2000

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CHMUTOV, K.V.

Nikolai Aleksandrovich Shilev; the 25th anniversary of his death.
Koll.shur.17 no.5:403-405 S-O '55. (MLBA 9:1)
(Shilev, Nikolai Aleksandrovich, 1872-1930)

CHMUTOV, K. V.

873. Apparatus for measuring the rate of flow
of solutions in laboratory chromatographic columns.
K. V. Chmutov, I. B. Gapon and M. D. Yudin
~~Inst. Phys. Chem. Acad. Sci. Moscow, Zvezd~~
~~Lab.~~ 1955, 21 (5), 627-629. Continuous registering
of rates of flow of liquids in chromatographic
columns over the range 1 to 50 ml per min. is
effected by means of a simple home-made rota-
meter, the construction of which is described and
illustrated.

G. S. Smith

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BUBYREVA, N.S.; MARKIN, B.I.; GEDUTOV, K.V.

Attachment for the ADV-200 analytical balance for remote weighing.
Zav.lab.21 no.10:1253 '55. (MLRA 9:1)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR.
(Balance)

KUZNETSOV, V.A.; CHMUTOV, K.V.

~~SECRET~~
Integrating attachment for recording devices. Zav.lab.21 no.12:
1508-1509 '55. (MIRA 9:4)
(Electronic apparatus and appliances) (Recording instruments)

CHMUTOV, K.V.; YERMISHIN, V.Ye.

A graphic plotting device for calculating the derivatives of functions. Zhur.fiz.khim.29 no.5:930-932 My'55. (MIRA 8:12)

1. Akademiya nauk SSSR, Institut fizicheskoy khimii, Moscow (Mathematics--Graphic methods)

arsenic⁺⁺⁺, antimony⁺⁺⁺, and tin⁺⁺. K. M. Ollerton. Analysis of

✓ Apparatus for selecting liquid samples in chromatographic
analysis. K. V. Chumakov and V. T. Avdeyev. *Zhurnal
Lob. 22, 2 (1968).* This app. is designed for taking sam-
ples from a chromatographic column. The app. is based on
a carousel-type design with a variable period of rotation.
I. R. Kozlov

Category : USSR/Atomic and Molecular Physics - Liquids

D-8

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3570

Author : ~~Subbotina~~eva, N.S., Chmutov, K.V., Markin, B.I.

Inst : Institute of Physical Chemistry, Academy of Sciences USSR

Title : Combined Instrument for Measurement of Viscosity and Melting Temperature.

Orig Pub : Zavod. laboratoriya, 1956, 22, No 3, 355-357

Abstract : Description of a viscosimeter, which makes it possible to determine the viscosity η of electron-conducting liquids from the time τ that a given value of liquid flows from a pipette through a calibrated capillary tube into a test tube. A set of pipettes with various capillaries makes it possible to vary η over a wide range (up to hundreds of poises). The value of τ is determined with the aid of an electric signalling scheme, which operates upon closing of a relay circuit (controlling a signal lamp), formed by the liquid and electrodes of various lengths, soldered into the test tube enclosing the pipette, and located in the lower part of the test tube. The length of τ between signals is measured with a stop watch. To measure freezing temperatures, the junctions of a differential thermocouple are introduced into two tubes, one with the investigated liquid and the other with a standard liquid, and the Kurnakov

Card : 1/2

Category : USSR/Atomic and Molecular Physics - Liquids

D-8

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3570

recording pyrometer is used to record the temperature-time and the temperature difference-time curves. The temperature of the system is regulated with the aid of a liquid flowing in the jacket of the instrument. The instrument permits remote measurements.

Card : 2/2

1.111

USSR/ Chemistry - Laboratory equipment

Card 1/1 Pub. 147 - 26/35

Authors : Aleksandrov, A. V.; Sinitsyn, V. I.; and Chmutov, K. V.

Title : Simple device for the control of cryostat temperature

Periodical : S. 111 - 112

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308930004-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308930004-4"

CHMUTOV, K.V.; ZHUKOVSKAYA, Ye.G.

Nikolai Aleksandrovich Shilov. Znan.sila 31 no.5:14-20 My '56.
(MLBA 9:8)

1. Chlen-korrespondent Akademii nauk SSSR.
(Shilov, Nikolai Aleksandrovich, 1872-1930)

Chernitov, K.V.

PHASE I BOOK EXPLOITATION

363

Chernitov, Konstantin Vasil'yevich, Corresponding Member of the Academy of Sciences, U

Sorbtsiya (Sorption) Moscow, Gostekhizdat, 1957. 58 p. (Nauchno-populyarnaya biblioteka, vyp. 96) 50,000 copies printed.

Ed.: Katrenko, D.A.; Tech. Ed.: Murashova, N.Ya.

PURPOSE: The book is designed to develop an interest in the science of sorption and the presentation is of the popularization-of-science type.

COVERAGE: The author explains the processes of physical and chemical adsorption and discusses the various types of sorbents. He also gives methods of lowering production costs in this field. The processes of capillary condensation, chemisorption, and chromatography are described. There are no references or personalities given.

Card 1/2

Sorption (Cont.)

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1. Clinging Odors	3
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AVAILABLE: Library of Congress

BK/mal
June 2, 1958

Card 2/2

CHMUTOV, K.V., otvetstvennyy redaktor; SHEMYAKIN, F.M., professor, otvetstvennyy redaktor; DAVANKOV, A.B., redaktor; RACHINSKIY V.V., redaktor; SALDAIYE, K.M., redaktor; SENOV, P.L., professor, redaktor; TROSTYANSKAYA, Ye.V., professor, redaktor; YEGOROV, N.G., redaktor izdatel'stva; ASTAF'YEVA, G.A., tekhnicheskii redaktor.

[Studies in ion-exchange chromatography; work of the conference on the application of ion-exchange chromatography in medical and food industry] Issledovaniia v oblasti ionoobmennoi khromatografii; trudy soveshchaniia po primeneniiu ionoobmennoi khromatografii v meditsinskoi i pishchevoi promyshlennosti. Moskva, 1957. 193 p. (MIRA 10:6)

1. Akademiya nauk SSSR. Komissiya po khromatografii. 2. Chlen-korrespondent Akademii nauk SSSR (for Chmutov)
(Ion exchange) (Chromatographic analysis)

CHMUTOV, K.V.
CHERNYAYEV, I.I., akademik, red.; STYRIKOVICH, M.A., red.; CHMUTOV, K.V., red.;
SHKROB, M.S., doktor ~~tekh.~~ nauk, red.; RAVICH, M.F., doktor khim.
nauk, red.; PIROPOL'SKIY, Z.L., red. izd-va; SHAPKIN, I.F., red.
izd-va; KISILEVA, A.A., tekhn.red.

[Intra-boiler physical and chemical process, water preparation and
water operations of boilers in electric power plants of high and
ultrahigh parameters] Vnutrikotlovye fiziko-khimicheskie protsessy,
vodopodgotovka i vodnye rezhimy kotlov na elektrostantsiyakh
vysokikh i sverkhvysokikh parametrov. Moskva, 1957. 594 p.

(MIRA 11:2)

1. Akademiya nauk SSSR. Komissiya po paru vysokikh parametrov.
2. Chlen-korrespondent AN SSSR (for Styrikovich, Chmutov)
(Boilers) (Electric power plants)

CHMUTOV, K.

Motion of a satellite. IUn.tekh.no.12:38-39 D '57.

(MIRA 10:12)

1. Chlen-korrespondent AN SSSR.

(Artificial satellites)

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CONFIDENTIAL
EXCLUDED FROM AUTOMATIC
DOWNGRADING AND
DECLASSIFICATION

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308930004-4"

Chmutov, K. V.

AUTHOR: Chmutov, K. V.

TITLE: Instrument for Graphic Construction of a Derivative (Pribor dlya graficheskogo postroyeniya proizvodnoy)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, No. 1, pp. 94-96 (U.S.S.R.)

ABSTRACT: This article describes the design of a simple instrument with the aid of which one can graphically construct a derivative in a few seconds. With the aid of an eyepiece one places the fixing and printing device tangent to any point on an original curve. The value of the ordinate of the end of the section which is equal to the tangent of the angle of inclination tangent at a given point automatically transfers itself from the axis of the abscissae on to another sheet of paper. A series of such points form the graph of a function. The design and functioning are explained in detail illustrated with a diagram of the instrument and sample graphs. There are 2 Slavic references.

ASSOCIATION:

Card 1/2

Preparation of chemical waste for use with antidotes
to chemical warfare agents and for the treatment of
chemical warfare agents. Work with and the use of
chemical warfare agents is required in the
preparation of chemical waste as a part of the
preparation of chemical waste for use with antidotes
to chemical warfare agents and for the treatment of
chemical warfare agents.

CHMUTOV, K.V.

32-8-60/61

AUTHOR: Chmutov, K.V., Corresponding Member of the USSR Academy of Sciences

TITLE: A Review of the Work by P.I.Voskresenskiy "Bases of the Technology of Laboratory Work" (P.I.Voskresenskiy, Osnovy tekhniki laboratornykh rabot)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 1015-1015 (USSR)

ABSTRACT: The above work is described as an excellent manual for beginners in chemical laboratory work. The fact that the author often mentions things that may appear to be "insignificant" and that he dwells upon and repeats such elementary notions as "everybody must have in his head", even though this may appear somewhat tedious, is described as valuable from a pedagogical point of view.

It is further said, that, though the book may be described as satisfactory in the theoretical sense, it nevertheless has faults of an editorial character such as were already criticized in previous works by the same author. This is the case particularly when he deals with "insignificant" matters, as e.g. the wrong application of certain terms as "warming up" instead of "temperature" etc. An apparatus, which is described on page 79, must be described as being dangerous with respect to catching fire. In some cases it is recommended that certain devices be made at home as a hobby, but the instructions as to how this can be done are insufficient.

Card 1/2

A Review of the Work by P.I.Voskresenskiy "Bases of the
Technology of Laboratory Work.

32-8-60/61

On the whole, the book is said to have created a "positive impression!"
It was published in an edition of 18.000 copies, it has 271 pages,
and its price is 5 Roubles (1956)

ASSOCIATION: Akademiya nauk SSSR

AVAILABLE: Library of Congress

Card 2/2

Chmatov K. V.

AUTHOR: Chmatov, K. V. 32-9-1/43

TITLE: Chromatographical Method and Prospects of Its Development (Kromatograficheskiy metod i perspektivy yego razvitiya)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 25, Nr 9, pp. 1019-1022 (USSR)

ABSTRACT: Here a survey on the method itself, of its tasks and the directions of its development is given. The chromatography develops into several directions. The adsorption-ion exchange-, distribution- and the coagulation- chromatography have to be mentioned here. Recently the distribution- chromatography with application of a field, the electrophoretical chromatography, has propagated extensively. The column-chromatography, the molecular and the ion-exchange chromatography were the soonest to leave the laboratory in order to find a steadily increasing application in the industry. The distribution- chromatography as the most accurate analytical method is applied especially by the biologists. The so-called gas-liquid-chromatography recently has found a far-reaching application in the technique of the gas-mixtures distribution. The coagulation-chromatography is already beginning to be applied in the industry and is here used for the purification of the technological quantities of some salts of admixtures in heavy metals. Finally the complex-forming column-chromatography has to be mentioned. This one is applied in the separation

Card 1/2

Chromatographical Method and Prospects of Its Development. 32-9-1/43

of rare earths in the industrial extent, in the analyses of the fission products of the uranium in the laboratory and for the identification of the artificial transuranium elements. There are no tables, figures or references.

AVAILABLE: Library of Congress

Card 2/2

CHMUTOV, K.V.

AUTHOR: Chmutov, K.V., Avgul', V.T. 32-9-25/43

TITLE: New Automatic Devices for Chromatographic Analysis (Novyye avtomaticheskiye pribory dlya khromatograficheskogo analiza)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 9, pp.1115-1120 (USSR)

ABSTRACT: First, general considerations concerning the automatization of some stages of chromatographic analysis are dealt with. According to them, new constructions for devices for the taking of samples in a column-chromatography are described. The driving devices for the displacement of receivers, the feed-devices for the quantities of liquids, and the re-calculating scheme are described in detail. There are 10 figures and 8 Slavic references.

ASSOCIATION: Institute for Physical Chemistry AN USSR (Institut fizicheskoy khimii Akademii nauk SSSR)

AVAILABLE: Library of Congress

Card 1/1

CHMUTOV, K.V.; AVGUL', V.P.

New device for chromatographic analysis. Zhur.fiz.khim. 31
no.3:724-725 Mr '57. (MIRA 10:7)
(Chromatographic analysis)

CHMUTOV, K.V.; PROKHOROV, V.A.; ALEKSEYEV, N.G.

CHMUTOV, K.V.; PROKHOROV, V.A.; ALEKSEYEV, N.G.

An integrating device for dosing radiation energy [with summary
in English]. Zhur.fiz.khim.31 no.8:1898-1899 Ag '57. (MIRA 10:12)

1. AN SSSR, Institut fizicheskoy khimii, Moskva.
(Chemical apparatus)